

(ii) Inflight performance of assigned duties accomplished from the flight engineer station during taxi, runup, take-off, climb, cruise, descent, approach, and landing;

(iii) Accomplishment of other functions, such as fuel management and preparation of fuel consumption records, and normal and emergency or alternate operation of all airplane flight systems, performed either inflight, in an airplane simulator, or in a training device.

Flight engineers possessing a commercial pilot certificate with an instrument, category and class rating, or pilots already qualified as second in command and reverting to flight engineer, may complete the entire flight check in an approved airplane simulator.

(b) Except as permitted in paragraph (c) of this section, the initial flight training required by paragraph (a) of this section must include at least the same number of programmed hours of flight training and practice that are specified for a second in command pilot under § 121.424(c) unless reduced under § 121.405.

(c) If the certificate holder's approved training program includes a course of training utilizing an airplane simulator or other training device under § 121.409(c), each flight engineer must successfully complete in the simulator or other training device—

(1) Training and practice in at least all of the assigned duties, procedures, and functions required by paragraph (a) of this section; and

(2) A flight check to a flight engineer level of proficiency in the assigned duties, procedures, and functions.

[Doc. No. 9509, 35 FR 90, Jan. 3, 1970, as amended by Amdt. 121-144, 43 FR 22647, May 25, 1978]

§ 121.426 Flight navigators: Initial and transition flight training.

(a) Initial and transition flight training for flight navigators must include flight training and a flight check that are adequate to insure his proficiency in the performance of his assigned duties.

(b) The flight training and checks specified in paragraph (a) of this section must be performed—

(1) Inflight or in an appropriate training device; or

(2) In operations under this part if performed under supervision of a qualified flight navigator.

§ 121.427 Recurrent training.

(a) Recurrent training must ensure that each crew member or dispatcher is adequately trained and currently proficient with respect to the type airplane (including differences training, if applicable) and crewmember position involved.

(b) Recurrent ground training for crewmembers and dispatchers must include at least the following:

(1) A quiz or other review to determine the state of the crewmember's or dispatcher's knowledge with respect to the airplane and position involved.

(2) Instruction as necessary in the subjects required for initial ground training by §§ 121.415(a) and 121.805, as appropriate, including emergency training (not required for aircraft dispatchers).

(3) For flight attendants and dispatchers, a competence check as required by §§ 121.421(b) and 121.422(b), respectively.

(4) Approved recurrent CRM training. For flight crewmembers, this training or portions thereof may be accomplished during an approved simulator line operational flight training (LOFT) session. The recurrent CRM training requirement does not apply until a person has completed the applicable initial CRM training required by §§ 121.419, 121.421, or 121.422.

(c) Recurrent ground training for crewmembers and dispatchers must consist of at least the following programmed hours unless reduced under § 121.405:

(1) For pilots and flight engineers—

(i) Group I, reciprocating powered airplanes, 16 hours;

(ii) Group I turbopropeller powered airplanes, 20 hours; and

(iii) Group II airplanes, 25 hours.

(2) For flight navigators—

(i) Group I reciprocating powered airplanes, 12 hours;

(ii) Group I turbopropeller powered airplanes, 16 hours; and

(iii) Group II airplanes, 16 hours.

(3) For flight attendants—

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- (i) Group I reciprocating powered airplanes, 4 hours;
 - (ii) Group I turbopropeller powered airplanes, 5 hours; and
 - (iii) Group II airplanes, 12 hours.
- (4) For aircraft dispatchers—
- (i) Group I reciprocating powered airplanes, 8 hours;
 - (ii) Group I turbopropeller powered airplanes, 10 hours; and
 - (iii) Group II airplanes, 20 hours.
- (d) Recurrent flight training for flight crewmembers must include at least the following:

(1) For pilots, flight training in an approved simulator in maneuvers and procedures set forth in the certificate holder's approved low-altitude windshear flight training program and flight training in maneuvers and procedures set forth in appendix F to this part, or in a flight training program approved by the Administrator, except as follows—

(i) The number of programmed inflight hours is not specified; and

(ii) Satisfactory completion of a proficiency check may be substituted for recurrent flight training as permitted in § 121.433(c).

(2) For flight engineers, flight training as provided by § 121.425(a) except as follows—

(i) The specified number of inflight hours is not required; and

(ii) The flight check, other than the preflight inspection, may be conducted in an airplane simulator or other training device. The preflight inspection may be conducted in an airplane, or by using an approved pictorial means that realistically portrays the location and detail or preflight inspection items and provides for the portrayal of abnormal conditions. Satisfactory completion of an approved line-oriented simulator training program may be substituted for the flight check.

(3) For flight navigators, enough inflight training and an inflight check to insure competency with respect to operating procedures and navigation equipment to be used and familiarity with essential navigation information

pertaining to the certificate holder's routes that require a flight navigator.

[Doc. No. 9509, 35 FR 90, Jan. 30, 1970, as amended by Amdt. 121-80, 36 FR 19362, Oct. 5, 1971; Amdt. 121-144, 43 FR 22647, May 25, 1978; Amdt. 121-199, 53 FR 37697, Sept. 27, 1988; Amdt. 121-250, 60 FR 65949, Dec. 20, 1995; Amdt. 121-281, 66 FR 19043, Apr. 12, 2001]

§ 121.429 [Reserved]

Subpart O—Crewmember Qualifications

§ 121.431 Applicability.

(a) This subpart:

(1) Prescribes crewmember qualifications for all certificate holders except where otherwise specified. The qualification requirements of this subpart also apply to each certificate holder that conducts commuter operations under part 135 of this chapter with airplanes for which two pilots are required by the aircraft type certification rules of this chapter. The Administrator may authorize any other certificate holder that conducts operations under part 135 of this chapter to comply with the training and qualification requirements of this subpart instead of subparts E, G, and H of part 135 of this chapter, except that these certificate holders may choose to comply with the operating experience requirements of § 135.344 of this chapter, instead of the requirements of § 121.434; and

(2) Permits training center personnel authorized under part 142 of this chapter who meet the requirements of §§ 121.411 through 121.414 to provide training, testing, and checking under contract or other arrangement to those persons subject to the requirements of this subpart.

(b) For the purpose of this subpart, the airplane groups and terms and definitions prescribed in § 121.400 and the following definitions apply:

Consolidation is the process by which a person through practice and practical experience increases proficiency in newly acquired knowledge and skills.

Line operating flight time is flight time performed in operations under this part.

Operating cycle is a complete flight segment consisting of a takeoff, climb,